



#8/A
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SEQUENCE LISTING

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COPY OF PAPERS
ORIGINALLY FILED

<110> Suga, Hiroaki

<120> Catalytic RNA Molecules with Aminoacylation Activity

<130> 11520.0222

<140> US 09/721,414

<141> 2000-11-22

<150> US 60/167,331

<151> 1999-11-24

<150> US 60/214,382

<151> 2000-06-28

<160> 22

<210> 1

<211> 110

<212> DNA

<213> artificial sequence

<220>

<221> n

<222> 21-90

<223> synthetic oligonucleotide containing random pool of 70 nucleotides; n represents a,t,g or c.

<400> 1

| | |
|---|-----|
| ggatcgtcag tgcattgaga nnnnnnnnnn nnnnnnnnnn | 40 |
| nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn | 80 |
| nnnnnnnnnn ggtggtatcc ccaaggggta | 110 |

<210> 2

<211> 76

<212> DNA

<213> artificial sequence

<220>

<223> completely synthesized primer complementary to the otrNAGln

<400> 2

| | |
|---|----|
| tggctgcggt acgaggattc gaacctcgga atgccggatt | 40 |
| tagaaaatccg gtcccttacc ccttggggat accacc | 76 |

<210> 3

<211> 52

<212> DNA

<213> artificial sequence

<220>

<223> 5' primer containing T7 promoter sequence

<400> 3

| | |
|---|----|
| ggtaacacgc atatgtaata cgactcacta taggatcgtc | 40 |
| agtgcatgga ga | 52 |

<210> 4

<211> 20

A¹

<212> DNA
 <213> artificial sequence

 <220>
 <223> 3'completely synthesized primer

 <400> 4
 tggctgcggt acgaggattc 20

 <210> 5
 <211> 146
 <212> RNA
 <213> artificial sequence

 <220>
 <223> pre-12 catalytic RNA

 <400> 5
 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu 40
 aacggugggu cauggguauu ggcguuagg gcgggaugcu 80
 acgcuggugg uauccccaag gguacgggac cggacauucg 120
 agauucgaau ccucguaccg cagcca 146

 <210> 6
 <211> 151
 <212> RNA
 <213> artificial sequence

 <220>
 <221> n
 <222> 12
 <223> pre-38 catalytic RNA; n represents a,u,g or c

 <400> 6
 ggaucgucag uncauugaga uuuccgcagc ccuucucacu 40
 aacggugggu ucauggguau uggcguuagg ugcgggaugc 80
 uacuacgcug gugguauccc caaggguacg ggaccggauc 120
 auucgagauu cgaauccucg uaccgcagcc a 151

 <210> 7
 <211> 150
 <212> RNA
 <213> artificial sequence

 <220>
 <223> pre-29 catalytic RNA

 <400> 7
 ggaucgucag ugcauugaga uuuccgcagg ccuucucac 40
 uaacgguggg ucauggguau uggcguuagg ugcgggaugc 80
 uacuacgcug gugguauccc caaggguacg ggaccggaca 120
 uucgagauuc gaauccucgu accgcagcca 150

 <210> 8
 <211> 150
 <212> RNA
 <213> artificial sequence

<220>

<223> pre-36 catalytic RNA

<400> 8

| | | | | |
|------------|------------|-------------|-------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagc | ccuucucacu | 40 |
| aacggugggu | cauggguauu | ggcguuaggu | gcggggaugcu | 80 |
| acuacgcugg | ugguaucccc | aagggguacgg | gaccggauca | 120 |
| uucgagauuc | gaauccucgu | accgcagcca | | 150 |

<210> 9

<211> 150

<212> RNA

<213> artificial sequence

<220>

<223> pre-24 catalytic RNA

<400> 9

| | | | | |
|------------|------------|-------------|------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagg | cccucucac | 40 |
| uaacgguggg | ucauggguau | uggcguuagg | ugcgggaugc | 80 |
| uacuacgcug | gugguauccc | caagggguacg | ggaccggaca | 120 |
| uucgagauuc | gaauccucgu | accgcagcca | | 150 |

<210> 10

<211> 149

<212> RNA

<213> artificial Sequence

<220>

<223> pre-25 catalytic RNA

<400> 10

| | | | | |
|------------|------------|-------------|------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagc | ccuucucacu | 40 |
| aacggugggu | cauggguauu | ggcguuaggu | gcggggauc | 80 |
| acuacgcugg | ugguaucccc | aagggguacgg | gaccggacau | 120 |
| ucgagauucg | aauccucgua | ccgcagcca | | 149 |

<210> 11

<211> 149

<212> RNA

<213> artificial Sequence

<220>

<223> pre-22 catalytic RNA

<400> 11

| | | | | |
|------------|------------|-------------|-------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagc | ccuucucacu | 40 |
| aacggugggu | cauggguuuu | ggcguuaggu | gcggggaugcu | 80 |
| acuacgcugg | ugguaucccc | aagggguacgg | gaucggacau | 120 |
| ucgagauucg | aauccucgua | ccgcagcca | | 149 |

<210> 12

<211> 149

<212> RNA

<213> artificial Sequence

<220>

<221> n

<222> 112

<223> pre-5 catalytic RNA; n represents a,u,g or c

<400> 12

| | | | | |
|------------|------------|------------|------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagc | cccucucacu | 40 |
| aacggugggu | cauggguauu | ggcguuaggu | gcgggaugcu | 80 |
| acuacgcugg | ugguaucucc | aaggguaacg | gnccggacau | 120 |
| ucgagauucg | aauccucgua | ccgcagcca | | 149 |

<210> 13

<211> 149

<212> RNA

<213> artificial Sequence

<220>

<223> pre-19 catalytic RNA

<400> 13

| | | | | |
|-------------|------------|------------|------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagc | ccuucucacu | 40 |
| aacgguaaggu | cauggguauu | ggcguuaggu | gcgggaugcu | 80 |
| acuacgcugg | ugguaucucc | aaggguaacg | gaccggacau | 120 |
| ucgagauucg | aauccucgua | ccgcagcca | | 149 |

<210> 14

<211> 150

<212> RNA

<213> artificial Sequence

<220>

<223> pre-8 catalytic RNA

<400> 14

| | | | | |
|------------|-------------|-------------|------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagc | ccuucucacu | 40 |
| aacggugggu | ucauggguauu | uggcguuagg | ugcgggaugc | 80 |
| uacuacgcug | gugguaucuu | caaggguaacg | ggaccggaca | 120 |
| uucuagauuc | gaauccucgu | accgcagcca | | 150 |

<210> 15

<211> 148

<212> RNA

<213> artificial Sequence

<220>

<223> pre-23 catalytic RNA

<400> 15

| | | | | |
|------------|------------|------------|------------|-----|
| ggaucgucag | ugcauugaga | uuuccgcagc | ccuucucacu | 40 |
| aacggugggu | cauggguauu | ggcguuaggu | gcgggaugcu | 80 |
| acuacgcugg | ugguaucucc | aggguaacgg | accggacauu | 120 |
| cgagauucga | auccucguac | cgcagcca | | 148 |

<210> 16

<211> 75

<212> RNA

<213> Escherichia coli

<220>

<223> otRNA

<220>

<223> V2 variant of otRNA

<400> 21

| | |
|---|----|
| ggugguaucc ccaaggggua cgggaccgga uucuaaaucc | 40 |
| ggcauuccga gauucgauc cucguaccgc agcca | 75 |

<210> 22

<211> 73

<212> RNA

<213> artificial sequence

<220>

<223> V3 variant of otRNA

<400> 22

| | |
|---|----|
| ggugguaucc ccaaggguaa gggaccggau ucuaaauccg | 40 |
| gcuaucgagg uucgaauc cuuaccgcag cca | 73 |

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